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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,915	05/25/2001	Thomas Daniel	208608US0PCT	2083
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
METZMAIER, DANIEL S				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
06/28/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/831,915

Applicant(s)

DANIEL ET AL.

Examiner

Daniel S. Metzmaier

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/16/10; 4/9/10; 5/7/10; & 5/10/10.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-14, 16-18, 20, 21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 16-18, 20, 21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-7, 10-14, 16-18, 20-21 and 23-26 are pending.

Applicants have filed the following since the Office Action mailed 16 December 2009.

- (1) 16 March 2010: Including (i) a new claim list and (ii) Remarks;
- (2) 09 April 2010: Including (i) a 1st Declaration under 37 CFR 1.132 by Dr. Manfred Essig. The execution date thereof is unclear since the signature and date did not reproduce well electronically, (ii) a 2nd Declaration under 37 CFR 1.132 by Dr. Manfred Essig. The execution date thereof is unclear since the signature and date did not reproduce well electronically;
- (3) 07 May 2010: Including (i) Declaration under 37 CFR 1.132 by Dr. Thomas Daniel. Declaration executed on 07 May 2010;
- (4) 10 May 2010 Including (i) Declaration under 37 CFR 1.132 by Dr. Volker Braig. Declaration executed on 10 May 2010.

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 25 lacks any transitional language in defining the

composition or the process said composition has been prepared. claim 25 is drafted in product-by-process format. It is unclear what is applicants' intended scope of claim 25, *i.e.*, open ("comprising"), closed ("consisting of"), or somewhere intermediate (:consisting essentially of").

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 6-7, 10-14, 16, 18, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as obvious over The Procter & Gamble Company, WO 97/46195, (hereafter Procter & Gamble), in view of Trinh et al, US 5,429,628 (example 9, column 25, lines 35-40) and **Modern Superabsorbent Polymer Technology**, edited by Fredric L. Buchholz and Andrew T. Graham, Wiley-VCH, pp. 97-101 (November 1997). Procter

& Gamble (page 6, 2nd and 3rd paragraphs; examples and claims) discloses the combination of silica, AGM (polyacrylate), and zeolite as an odour control system in an absorbent article.

Procter & Gamble differs from the claims in the clearly envisaged disclosure in Procter & Gamble in the exemplified formation of the materials employed in making the dried hydrogels or the order of the process steps.

Trinh et al (example 9, column 25, lines 35-40) discloses AGM is commercial polyacrylate particles (Drytech 512 from Dow Chemical). AGM reads on said dried hydrogel.

Procter & Gamble (page 5, 2nd paragraph) discloses the odour control system may comprise sodium silicate as an essential component alternative to silica. Procter & Gamble (page 6, 4th paragraph) discloses the odour control system may be made employing spray drying, spray mixing, or agglomeration processes. Procter & Gamble further discloses the silicate itself may act as a binder for the odour control system. Procter & Gamble (page 6, 3rd paragraph) discloses the odour control system may be in the form of particulates, granulates, flakes, noodles, and exudates.

Modern Superabsorbent Polymer Technology (pp. 97 et seq) discloses the advantageous step of surface cross-linking to avoid gel blocking of soluble polyacrylic acids.

These references are combinable since they teach polyacrylate polymers for absorbent articles and odour control systems therefore useful for personal use articles, e.g., sanitary napkins and diapers. It would have been obvious to one of ordinary

skilled in the art at the time of appellants' invention to post cross-link the odour control systems taught in the Procter & Gamble reference, which employ polyacrylates for the advantage of avoiding gel blocking.

Trinh et al further (column 16, lines 47 et seq; and example 9) discloses forming odour control granules for absorbent articles comprising AGM and zeolite in particulate form by adding water, blending and drying. Trinh et al (column 16, lines 47 et seq) teaches gel formation and further teach silica materials.

It would have been obvious to one of ordinary skilled in the art at the time of appellants' invention to employ the methods of intimately mixing the alkali silicate and polyacrylates as conventional in the art as shown by the Trinh et al reference.

To the extent Procter & Gamble differs from the claims in the value of n is not disclosed in the reference, appellants acknowledge the alkali silicates are commercially available. Appellants have not shown any criticality for the claimed ratio of alkali metal oxides to silica, which are commonly available sodium silicate.

6. Claims 4-5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Procter & Gamble Company, WO 97/46195, (hereafter Procter & Gamble), as evidenced by or in view of Trinh et al, US 5,429,628 (example 9, column 25, lines 35-40). Procter & Gamble (page 6, 2nd and 3rd paragraphs; examples and claims) discloses the combination of silica, AGM, and zeolite as an odour control system in an absorbent article.

Trinh et al (example 9, column 25, lines 35-40) discloses AGM is commercial polyacrylate particles (Drytech 512 from Dow Chemical). AGM reads on said dried hydrogel.

Procter & Gamble differs from claims 4 and 5 in the point of addition of the sodium silicate and the further combination of a neutralizing agent, i.e., alkali metal hydroxide or alkali metal carbonate.

Procter & Gamble (examples) discloses the use of neutralized polyacrylates. Changes in the order of process steps has been held to be *prima facie* obvious. See MPEP 2144.04(C). Furthermore, the use of conventional neutralizing agents, i.e., sodium carbonate, is within the level of one having ordinary skill in the art at the time of appellants' invention for the advantage of adjusting the pH of the system for the advantage of making it hypoallergenic as would be required in The Procter & Gamble reference.

Procter & Gamble differs from claim 17 in the use of sodium silicate rather than potassium silicate claimed but discloses metal silicates and specifically mentions sodium silicate.

These references are combinable since they teach absorbent materials for personal use articles, e.g., sanitary napkins and diapers. It would have been obvious to one of ordinary skilled in the art at the time of appellants' invention to employ potassium silicate as an obvious functional equivalent to the sodium silicate and their structural similarity.

7. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as obvious over The Procter & Gamble Company, WO 97/46195, (hereafter Procter & Gamble), in view of Trinh et al, US 5,429,628 (example 9, column 25, lines 35-40) and **Modern Superabsorbent Polymer Technology**, edited by Fredric L. Buchholz and Andrew T. Graham, Wiley-VCH, pp. 97-101 (November 1997).

Procter & Gamble in view of Trinh et al and **Modern Superabsorbent Polymer Technology** disclose the compositions and methods of claims 25 and 26 for the same reasons set forth in the above rejection over the same references. Said reasons and citations are herein incorporated by reference.

Procter & Gamble differ from the claims 25 and 26 in the point of addition of the additive in the process of making the dried hydrogels. Specifically, product-by-process claim 25 has changed line 4 to read "before or during" rather than "before, during or after" set forth in claim 1. Process claim 26 is similar to claim 10 but has deleted "or admixing said solid gel" from line 6 of claim 10.

The P & G reference (page 6, 2nd full ¶) teaches the combination of silica, AGM and Zeolite as odor control systems.

Trinh et al (example 9, column 25, lines 35-40) discloses AGM is commercial polyacrylate particles (Drytech 512 from Dow Chemical).

The P & G reference (page 5, 2nd paragraph) discloses the odour control system may comprise sodium silicate as an essential component alternative to silica.

The P & G reference (¶ bridging pages 6 and 7) discloses silicate, i.e., sodium silicate, may be employed as a **binder** in processes of conventional methods, utilizing

spray drying, spray mixing or agglomeration processes. Accordingly, the sodium silicate itself may acts as a binder.

Procter & Gamble (page 6, 3rd ¶) discloses the odour control system may be in the form of particulates, granulates, flakes, noodles, and exudates.

Furthermore, Trinh et al (column 16, lines 47 et seq; and example 9) discloses forming odour control granules for absorbent articles comprising AGM and zeolite in particulate form by adding water, blending and drying. Trinh et al (column 16, lines 47 et seq) teaches gel formation and further teach silica materials.

It is reasonable to conclude from these facts that said admixing processes steps disclosed in the P & G reference and further in view of Trinh et al, which shows the state of the art wet processes, are prior to drying and the odor control systems are themselves absorbent materials. Appellants have not shown the compositions to be different than the prior art compositions and /or processes for the breadth of the claims.

Furthermore, appellants' claims do not exclude an intermediate drying step and to the extent said intermediate drying exist, appellants have not shown the products to be patentably distinct.

Procter & Gamble (page 6, 3rd ¶) discloses the odour control system may be in the form of particulates, granulates, flakes, noodles, and exudates.

Furthermore, Trinh et al (column 16, lines 47 et seq; and example 9) discloses forming odour control granules for absorbent articles comprising AGM and zeolite in particulate form by adding water, blending and drying. Trinh et al (column 16, lines 47 et seq) teaches gel formation and further teach silica materials.

It is reasonable to conclude that said admixing processes steps disclosed in the P & G reference and further in view of Trinh et al, which shows the state of the art wet processes, are prior to drying and the odor control systems are themselves absorbent materials. Appellants have not shown the compositions to be different than the prior art compositions.

To the extent the point of adding the additives of the P & G reference differs from claim 26, ". . . (selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results)". See MPEP § 2144.04(IV)(C) and case law cited therein.

Response to Arguments

8. Applicant's arguments filed 09 April and 10 May 2010 have been fully considered but they are not persuasive.
9. Applicants (pages 9 to 20) assert the silica acts as a binder and is not inside of or throughout the dried hydrogel particles in contrast to the prior art surface binding of the ADM particles with the silica. This has not been deemed persuasive for the following reasons.

The claims are drafted in product-by-process format and provide for admixing before, during and after polymerization and before drying. Applicants claims provide no transitional language, *e.g.*, open ("comprising"), closed ("consisting of"), or somewhere intermediate (:consisting essentially of"). Said claim has been interpreted as open to the further inclusion of steps and/or components in the process.

Secondly, applicants have asserted the products by the claimed process are not the same as those of Procter & Gamble (P & G) but said assertion of difference must persuasively include an unobvious difference. Difference alone does not render the invention unobvious. It is a well accepted tenet in patent law that the changing the order of mixing ingredient is *prima facie* obvious in the absence of data showing some criticality.

10. Applicants (pages 12-14) direct attention to the newly submitted declaration evidence to show a difference between the structure of the materials by the particular point of addition of the silica. Regarding the declaration evidence, the evidence specifically referenced in the photographs is similar to that which was presented to the Bd of Appeals. Initially, the declarations appear to have been filed electronically and the electronic reproduction of the photographs, which include color cannot be well ascertained. Furthermore and as noted above, mere difference alone does not show unobviousness.

11. Applicants (pages 17-19) further assert the comparative evidence in the specification shows superior absorbency. Said comparative examples provide no silicate at all, which is not deemed to be a proper comparison of the P & G reference teachings.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/Daniel S. Metzmaier/
Primary Examiner, Art Unit 1796**

DSM